

Title (en)

METHOD OF AND APPARATUS FOR FORMING HALFTONE IMAGES

Publication

**EP 0593989 A3 19940706 (EN)**

Application

**EP 93116255 A 19931007**

Priority

JP 30825592 A 19921021

Abstract (en)

[origin: EP0593989A2] Screen angles theta 1, theta 2 and theta 3 of first through the third halftone images, which are strongly related to the generation of moire, are determined by setting values of integers m1, n1, m2, n2, m3 and n3 which defines the screen angles by  $\tan \theta_1 = n_1/m_1$ ,  $\tan \theta_2 = n_2/m_2$ ,  $\tan \theta_3 = n_3/m_3$ . Suppose that first through third square areas for the first through third halftone dots have side lengths of L1, L2 and L3, which are integers, the first through third square areas includes  $(m_1<2> + n_1<2>)$ ,  $(m_2<2> + n_2<2>)$ , and  $(m_3<2> + n_3<2>)$  pieces of halftone dots, respectively. The values of the integers is determined to satisfy:  $m_1/L_1 - m_2/L_2 = n_3/L_3$ ; and  $-n_1/L_1 + n_2/L_2 = m_3/L_3$ . <IMAGE>

IPC 1-7

**H04N 1/40; H04N 1/46**

IPC 8 full level

**G03F 5/22** (2006.01); **G06T 5/00** (2006.01); **H04N 1/405** (2006.01); **H04N 1/46** (2006.01); **H04N 1/52** (2006.01)

CPC (source: EP US)

**H04N 1/4058** (2013.01 - EP US); **H04N 1/52** (2013.01 - EP US)

Citation (search report)

- [A] US 4084183 A 19780411 - KELLER HANS, et al
- [A] GB 2026283 A 19800130 - HELL R ING GMBH
- [A] GB 2098022 A 19821110 - DAINIPPON SCREEN MFG
- [A] DE 3320691 A1 19831215 - CANON KK [JP]
- [A] US 3742129 A 19730626 - ROBERTS W, et al

Cited by

EP2001218A1; EP2101482A1; EP2469835A1; US8169666B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 0593989 A2 19940427; EP 0593989 A3 19940706; EP 0593989 B1 19980812**; DE 69320293 D1 19980917; DE 69320293 T2 19990506;  
JP 2759186 B2 19980528; JP H06130656 A 19940513; US 5371612 A 19941206

DOCDB simple family (application)

**EP 93116255 A 19931007**; DE 69320293 T 19931007; JP 30825592 A 19921021; US 13323693 A 19931007